

**REMARKS/ARGUMENTS**

Favorable reconsideration and allowance of the present application are respectfully requested in view of the following remarks.

Claims 1-11 and 13-17 were pending. In this Amendment, claims 18-21 are added. Therefore, claims 1-11 and 13-21 are pending, of which claims 1, 14 and 17 remain independent.

In the Office Action, claims 1-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chan et al. ("Mobility Management ... IP Environment") in view of Dorenbosch et al. (U.S. Patent Publication No. 2004/0028009 A1). Applicants respectfully traverse.

An aspect of the present invention relates to a system that allows a user terminal in a network to simultaneously access a plurality of radio based access networks of differing access technologies. Fig. 3 of the present disclosure illustrates a non-limiting embodiment of such a system. The system in Fig. 3 includes a vehicular network 17 to which a plurality of user terminals may connect. In Fig. 3, only one user terminal 18 is shown for clarity reasons. The vehicular network 17 includes access selection adapters 22 and 23, one for each type of access network technology 19, 20. The vehicular network 17 also includes an access selector 26 which is access technology independent. As seen, the access selection adapter 22 and 23 as well as the access selector 26 are all provided separate from the user terminal 18. In other words, they are not part of the user terminal. The user terminal 18 communicates with the

access selector 26 using an IP address of the access selector 26. *Disclosure, page 9, lines 1-2.* This makes the user terminal independent of the access technologies used in the system.

This feature is reflected in independent claim 1 which recites, in part “a plurality of access selection adapters, each one being a network entity provided separate from the user terminal.” In the Office Action, Chan et al. is relied upon to allegedly teach or suggest the feature of the plurality of access selection adapters being provided separate from the user terminal. *Office Action, item 6.* Chan et al. does not disclose this feature.

Chan et al. is directed toward an approach to handover management by applying fuzzy logic concept to a heterogeneous environment in which mobility of user terminals between differing access technologies (Chan et al. refers to access technologies as access segments). *Chan et al., Abstract.* Attention is respectfully directed to Fig. 1 of Chan et al. which illustrates an architecture of the system under consideration. In this system, three different wireless access technologies are considered – GPRS, UMTS and a mobile satellite system. *Chan et al., introduction, first paragraph; Fig. 1.* The system also includes a multi mode terminal (MMT).

Chan et al. specifically states “a multi mode terminal (MMT) capable of operating in all access segments is also required.” *Emphasis added; Chan et al., page 42, column 2, third full paragraph.* This is confirmed in Fig. 1 which illustrates the MMT as including terminal equipment (TE), a terminal-

interworking unit (TI-IWU), and the three application technology specific terminals MT<sub>SAT</sub>, MS<sub>UMTS</sub> and MS<sub>GPRS</sub>.

In the Office Action, the Examiner is essentially alleging that the technology dependent specific terminal MT<sub>SAT</sub>, MS<sub>UMTS</sub> and MS<sub>GPRS</sub> are separate from the terminal equipment TE. On the contrary, these are all units that are contained within a single multi mode terminal MMT, which is clearly illustrated in Chan et al. Chan et al. discusses handover management of the MMT. *Chan et al., pages 45 et seq.* Simply put, components TE, TI-IWU, MT<sub>SAT</sub>, MS<sub>UMTS</sub> and MS<sub>GPRS</sub> are all part of a single multi mode terminal.

Thus, Chan et al. does not teach or suggest a plurality of access selector adapters, each one being a network entity provided separate from the user terminal. Dorenbosch et al. does not correct this deficiency of Chan et al. Indeed, since the technology specific terminal units are part of the MMT, Chan et al. actually teaches away from the feature of each of the access selection adapter being a network entity as recited. *See KSR v. Teleflex, 550 US\_\_\_, 127 S.Ct. 1727 (2007) ("When the prior art teaches away from combining certain know elements, discovery of successful means of combining them is more likely to be non-obvious.")*.

Thus, any combination of references that includes Chan et al. is improper.

But in addition, Chan et al. does not teach or suggest the feature of the access selector (also separate from the user terminal) which interacts with each

access selection adapter for selection of a radio access network based on an individual QoS profile associated with each application. The QoS profile represents the access technology independent information<sup>1</sup> associated with the application. In addition to the QoS profile, the radio access network is also selected based on the access technology independent status information.

In the Office Action, it is alleged that the service node illustrated in Fig. 1 is equivalent to the claimed access selector. Chan et al. provides no description regarding the service node. As such, it cannot be said that the service node interacts with each access adapter (MT<sub>SAT</sub>, MS<sub>UMTS</sub> and MS<sub>GPRS</sub>) for the selection of the access network.

It is noted that the service node is connected to edge routers (ER) in Fig. 1. Chan et al is clear that the edge routers are part of the Internet sub-network. *Chan et al., page 42, second column, first full paragraph.* This at best suggests that the service node communicates with the edge routers via IP only. The service node has no knowledge of the particular access network technology used by the MMT. Thus, the service node cannot in any manner have a role in interacting with the access adapters to select the actual access network. Dorenbosch et al does not correct this deficiency of Chan et al. That is, the combination of Chan et al and Dorenbosch et al does not teach or suggest the selecting the radio access network based on the QoS profile and the access technology independent status information.

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<sup>1</sup> To be distinguished from the access technology independent status information.

Further, there is no indication that any of the cited references disclose the QoS profile to represent access technology independent information of the application.

For at least the reasons stated above, independent claim 1 is distinguishable over the combination of Chan et al. and Dorenbosch et al. For similar reasons, independent claims 14 and 17 are also distinguishable over the combination of Chan et al. and Dorenbosch et al. The dependent claims are distinguishable over the same references by virtue of their dependencies from independent claims as well as on their own merits.

Applicants respectfully request that the rejection of claims based on Chan et al. and Dorenbosch et al. be withdrawn.

Claims 18-21 are added. No new matter is presented. These claims are allowable over the art of record by virtue of their dependencies from independent claims as well as on their own merits. Applicants respectfully request that the new claims be allowed.

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance. Should there be any outstanding matters that need to be resolved, the Examiner is respectfully requested to contact Hyung Sohn (Reg. No. 44,346), to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants respectfully petition for a one (1) month extension of time for filing a reply in connection with the present application, and the required fee is attached hereto.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_



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